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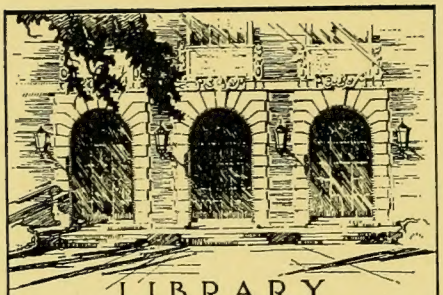

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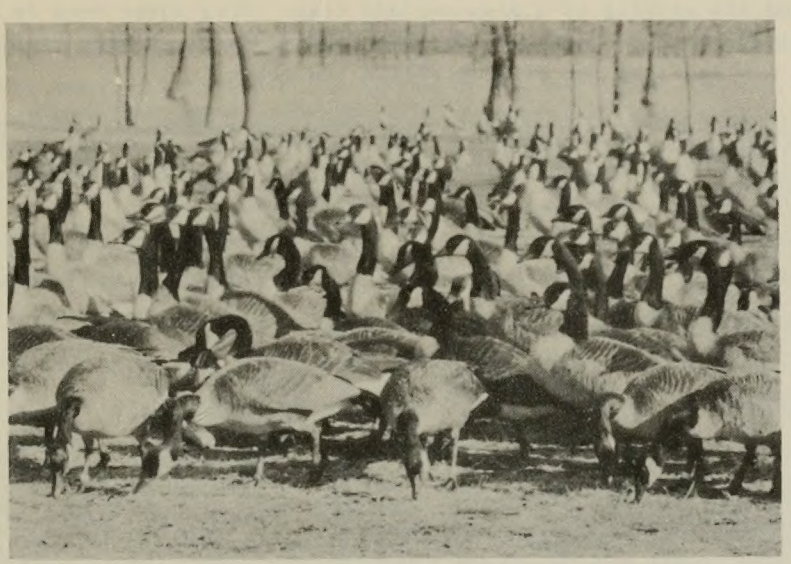
TRAPPING AND HANDLING CANADA GEESE

Harold C. Hanson



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NATURAL HISTORY SURVEY

Harlow B. Mills, Chief

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Fig. 1.--Securing the netting of a drop-curtain trap. Trap shown here is constructed of chicken wire and iron fence posts. Because the top netting is of chicken wire, a considerable number of iron posts are required for support inside the trap.

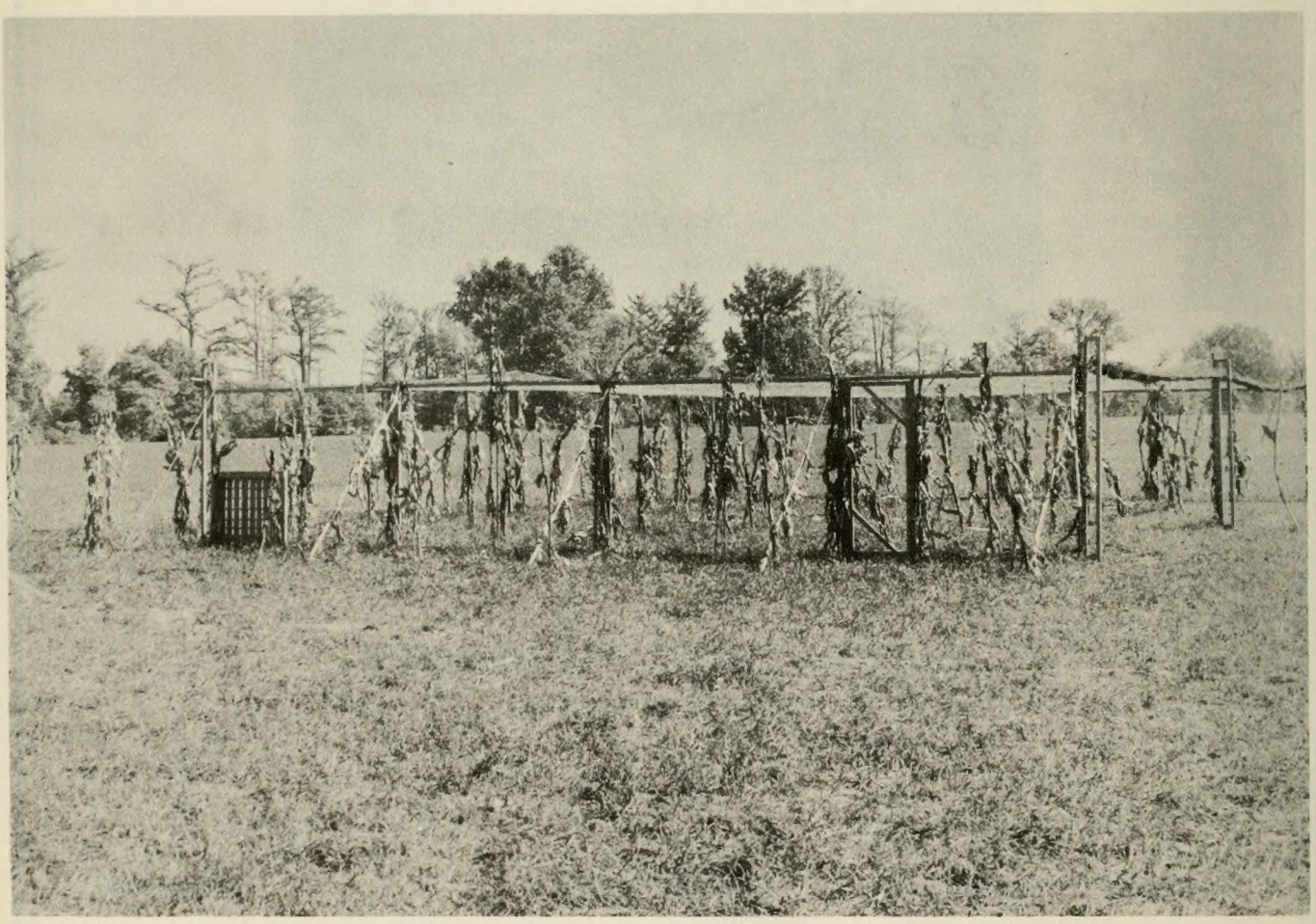

Fig. 2--Section type drop-curtain trap in use at the Horseshoe Lake Game Refuge. Top netting shown here is made of twine, thereby eliminating the need for support posts inside the trap.

TRAPPING AND HANDLING CANADA GEESE

Harold C. Hanson
Assistant Game Specialist

The ultimate success of wildlife research is often dependent upon the ease with which large numbers of individuals of the species under study can be trapped and banded. Until recently, the lack of knowledge concerning adequate trap design and efficient trapping and handling techniques has been an obstacle to research on the Canada goose, ***Branta canadensis***. Aside from the bandings of large numbers of geese by Jack Miner and his sons at Kingsville, Ontario, by the Illinois Natural History Survey at the Horseshoe Lake Game Refuge in southern Illinois, and by the U. S. Fish and Wildlife Service at the Mattamuskeet National Wildlife Refuge in North Carolina, large-scale bandings of Canada geese with full powers of flight are not known to the writer. Because adequate traps and trapping methods for Canada geese are not widely known, a resume of the trapping and handling techniques as carried out at Horseshoe Lake may be of value to others who contemplate goose research elsewhere in the country.*

TRAPS

The first successful trap constructed for use by the Illinois Natural History Survey in large-scale trapping of geese was designed and built by two of its employees, John M. Anderson and Jacob H. Lemm, in 1941. In 1944, the writer built three section traps, two of which incorporated the drop-curtain feature used by Anderson and Lemm.

An important feature of the first successful trap at Horseshoe Lake was two pipe-weighted curtains of cord netting that, when dropped by means of a long trigger-rope leading to a blind, closed off the two openings of a chicken-wire enclosure, fig. 1. This trap was semipermanent in construction. Iron fence posts spaced 8 to 10 feet apart and driven deep in the ground supported the woven-wire sides and the top netting, the netting resting on no. 12 support wires stretched across the top of the trap. As the horizontal wires sustained a considerable weight, they were supported by iron posts inside the trap, and their ends were brought to the ground outside the trap and fastened to small logs buried several feet deep. Traps of this construction may vary in size, but those that were found to be practicable at Horseshoe Lake were 40 x 50 feet. In general, the larger the trap the larger the catches, but every increase in the size of the trap creates greater construction difficulties.

As farming operations at Horseshoe Lake necessitated the rebuilding and razing of traps each season, a laborious and time-consuming job, a section trap 32 x 45 feet, consisting of eight 6- x 8-foot wood frames, to which chicken wire is permanently stapled, was put into operation in 1944, fig. 2. Each of the two sides of this trap consists of four frames bolted together. The use of cord netting instead of chicken wire to roof over the trap eliminates the need for support posts inside. Each of the two drop curtains, when in set position, rests on three sets of triggers that are so adjusted that all six triggers work simultaneously when the trigger rope or lead is pulled. A trap so constructed allows for great flexibility in field operations, since it can be easily taken down

*The techniques described here were developed at the Horseshoe Lake Game Refuge. This state refuge is under the management of the Illinois Department of Conservation. Assistance of this Department in several phases of the work is gratefully acknowledged.

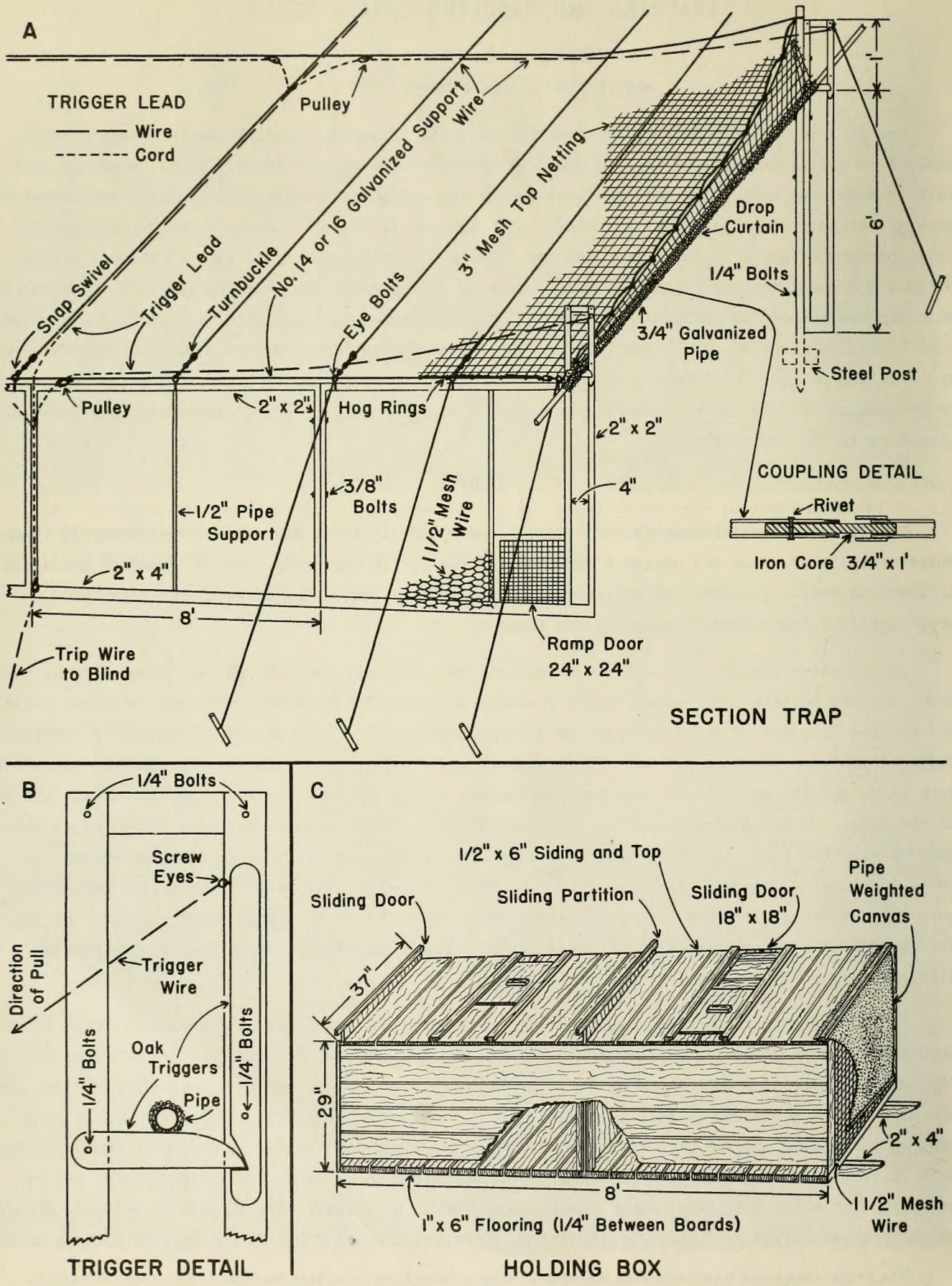

Fig. 3.--Construction details for drop-curtain type section trap and for holding box.

Fig. 4.--Swing-door type goose trap. This trap, like that shown in fig. 3, is also constructed in sections, but probably because of its heavy construction and conspicousness it did not prove to be very successful.

and set up in other locations or stored away for succeeding seasons. Construction details are shown in fig. 3. A smaller trap of similar design but having only one drop curtain was also successfully used at Horseshoe Lake.

A third trap, 24 x 30 feet, which employed two swinging doors to close off the entrances, was constructed in the spring of 1944, fig. 4. The following autumn it was set in a cornfield; perhaps because of its conspicuousness, little success attended its use. Expensive and difficult to construct, it was found to be inferior to the section traps described above. The illustration of this trap is also of passing interest in that it shows why deer are often a major obstacle to successful goose trapping at the Horseshoe Lake Game Refuge.

HOLDING BOXES

Two holding boxes, built in the autumn of 1943, contributed greatly to efficiency in carrying out trapping and banding operations, fig. 5. As the holding boxes can accommodate 40 geese each for short periods and 30 overnight, it was often possible to empty a trap within a few minutes and quickly free it for additional catches. In this way, two catches were occasionally made in a morning or in late afternoon. A sketch of one of these holding boxes is shown in fig. 3.

Hesitancy of the geese toward entering the holding box is reduced by first herding the geese

Fig. 5.--Holding boxes, loaded with geese, being hauled from trap site to banding site.

Fig. 6.--Driving geese from temporary alleyway formed by pipe-weighted cord curtain into chicken-wire passageway. From this passageway the desired number of geese are readily driven into the holding box for banding.

into a wood-frame and chicken-wire passageway outside the trap, figs. 6 and 7; from this passageway they can be driven into the holding box. The end of the holding box opposite its entrance (the end farther from the trap) is covered with chicken wire rather than boards, in order that the geese will see light at the farther end of the box and enter it more readily. The holding box is equipped with two vertical partitions that may be lowered and raised. One partition closes the end through which the geese enter, and the second divides the box into two sections to reduce congestion by keeping the geese from crowding to one end. Once the geese are secured in the box, a weighted canvas curtain is dropped over the wire end to prevent any sudden movement by the operator from frightening them.

The holding boxes used at Horseshoe Lake were built on skids so that they could be hauled away from the traps with a car or light tractor. When two boxes loaded with geese are to be moved, a tractor, or similar means of conveyance, is desirable, fig. 5.

A layer of straw spread on the floor of the holding boxes aids in keeping the boxed geese clean and dry for handling.

CORD CURTAIN

One person can readily handle a large catch of geese if he has the proper equipment. When a large trap is used, driving the geese into the holding box can be a vexing matter. However, this

Fig. 7.--Geese in wire passageway and holding box before being banded.

can be simplified by the use of an additional cord curtain or seine inside the trap, fig. 6. The curtain is the same height and length as the trap. One end is attached vertically to the ramp door section indicated in fig. 3, and for half its length the top edge is hog-ringed to the support wire nearest the drop curtain, while the bottom edge is weighted and temporarily held in place by threading a piece of iron pipe through the lower meshes. Thus, a temporary passageway can be formed inside the trap; this passageway is about the same width as the wire passageway on the outside. The remaining unattached half of the netting may be operated much in the manner of a fish seine: the geese are herded together and then a desirable number, usually about 30, are cut off from the remainder of the catch and driven into the holding box via the curtain alleyway and wire passageway, figs. 6 and 7. When not in use, this seine is bunched and tied to the ramp door section of the trap in order to reduce its conspicuousness.

Fig. 8.--Banding a Canada goose. Note rack for holding various types and colors of bands.

BANDING TABLE

When large numbers of birds are trapped and banded, any device that adds appreciably to the over-all efficiency is important. In this respect, a small table equipped with a rack for holding bands is helpful, fig. 8. A band rack proved particularly advantageous at Horseshoe Lake, as each age class of geese was given aluminum bands of a different color and frequently a numbered celluloid band for later identification with field glasses.

CAMOUFLAGE

Camouflage may be particularly important in trapping Canada geese early in autumn when food is plentiful outside the traps. Although the 1946 catches of geese at Horseshoe Lake were made without the use of camouflage, in previous years the traps were made less conspicuous with cornstalks. The stalks were transplanted in rows outside the entrance to the traps and along the sides. Inside, cornstalks were hog-ringed to the top netting so that, when they were struck by the geese, the butt

ends of the stalks could swing freely, thereby preventing the stalks from being trampled down the first time a large catch was made.

Olive drab proved to be the most inconspicuous color for painting the trap frames and other equipment.

BAITING

Early in the season, until the geese became accustomed to feeding in the vicinity of the traps at Horseshoe Lake, several bushels of corn were scattered about the traps daily. Later in the autumn, after satisfactory numbers of birds had established the habit of seeking food at the trap, a small pailful of shelled corn was generally sufficient for use outside the traps. The most effective use of this corn was made by scattering a few handfuls widely and then concentrating the remainder on a few stringers running out 4 or 5 feet beyond the entrance.

Ear corn is preferable to shelled corn for use inside the traps, as it retains the geese inside longer. Busily feeding geese in the trap often induce the more wary geese outside to enter.

New baiting techniques were constantly tried at Horseshoe Lake, depending on nearby food supplies and the number of geese "working" in the vicinity of the traps. The cardinal rule in baiting is not to overfeed the geese outside a trap. If long leads or stringers of grain are available at the entrances, the birds become satiated and take little interest in the food inside the trap.